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#### **OCEAN'S**

## MISSION STATEMENT

Here at the **Opioid** Crisis Education and **Advocacy Network** (OCEAN), we believe that community is rooted in a common experience, regardless of how that began. This country vilifies and blames individuals for opioid misuse although the issue is rooted in a much larger and corrupt system. We are working to correct the biases and counter the stigma against individuals affected by opioid addiction and opioid use disorder.





# MEET THE TEAM

OCEAN was created by a team of four Human Biology and Society (HBS) students from UCLA. They sought to widen perspectives on the pervasive opioid epidemic and how it was affecting American society. Together, they founded a non-profit organization that would embody the HBS way-challenging current ways of knowing and finding the intersections between biology, academia, policy, and society.



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# WHY WE ARE DIFFERENT

from other non-profit groups

#### **COALITION-BUILDING**

We join together experts In diverse fields, clients, and loved ones that are dedicated to ending stigma and producing alternative treatments to opioid addiction and misuse.

#### **DIRECTED ADVOCACY**

We understand the varying levels of advocacy, from the individual to government policy. We are committed to giving a voice to all that are affected by this omnipresent epidemic.

#### **COMMUNITY-BASED**

We are a community that makes our platforms accessible. Using several sociopolitical intersections, we encourage community engagement and resource literacy.

# **EXECUTIVE SUMMARY**

A word from the directors:

"Never doubt that a small group of thoughtful, committed citizens can change the world. Indeed, it's the only thing that ever has" -Margaret Mead

Drug and substance abuse affect millions of Americans a year, fueling a dramatic increase in the amount of overdose deaths as well as imposing enormous costs on society. Prescription drugs, especially opioids analgesics, are overprescribed and have been constantly abused, creating a crisis known as the opioid epidemic today. The opioid epidemic remains a significant pressing issue that continues to worsen and has grown to become a major concern in public health, healthcare, and health policy. 52,000 people died from drug overdose in 2015 alone, with over 30,000 of those individuals dying from opioid drugs (Vadivelu et al.. 2018). Life expectancy has decreased for Americans for the first time since 1999, and drug overdose deaths have tripled between 1999 and 2014 (Rummans et al., 2018, pg. 344). These drug overdoses were mainly both prescription and illicit opioid drugs. It has become increasingly clear that overprescription has become the primary driver in the opioid crisis, where the number of people dependent on opioids exceeds more than triple the amount of the current capacity to deliver treatment (Wiss, 2019).

In response to these staggering numbers and the growing crisis, the Opioid Crisis Education and Advocacy Network (OCEAN) has made addressing the opioid crisis a high priority by using evidencebased approaches to solve the issue at hand. While the opioid epidemic is being addressed at many different levels, there is still much to be done. OCEAN's strategic plan is to aim to solve the opioid epidemic through our three campaigns targeted at: 1.) addiction, 2.) medication, not abstinence, and 3.) harm reduction for the homeless by using the HBS way. These three campaigns are priority areas OCEAN feels like are the best ways to intervene and combat opioid abuse. By creating our nonprofit organization, we hope to solve the opioid crisis through community engagement and community-based standpoint, keeping in mind the best interests for the individual and community as a whole



#### **BACK TO BASICS**

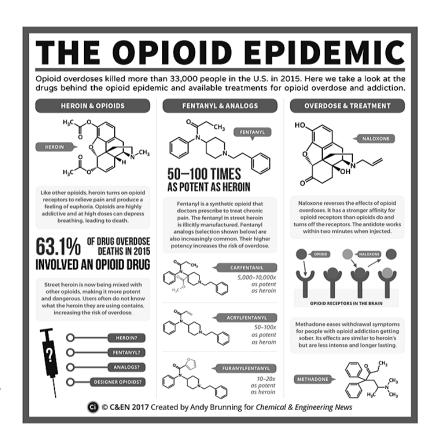
## WHAT IS AN OPIOID?

Opioids are a class of drugs naturally found In the opium poppy plant (Johns Hopkins Medicine, 20). They act on receptors in the brain and throughout the body to produce a widerange of effects, from pain relief to a euphorialike "high." Many are known to be prescription

medications (e.g. OxyContin or Vicodin) while others have been synthetically-produced as street drugs (e.g. heroin).

Opioids chemically change the brain's reward or pleasure system in a way that makes them extremely addictive (University of Michigan Medicine, 2016).

Misuse is due to the **desensitization** of receptors. People must then turn to illicitly-made opioids in order to avoid withdrawal.



#### **OUR SOLUTIONS**

- public provider ratings
- payment reform
- stigma reduction & provider bias training
- state/federal-level policy advocacy
- online opioid addiction recovery course
- nonprofit business continuity plan
- growing International relationships

#### AN OVERVIEW

## WHY IS IT AN EPIDEMIC?

## 10.3M

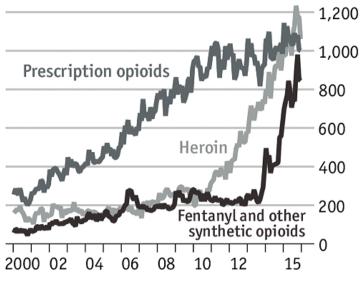
PEOPLE HAVE
MISUSED OR
ABUSED
PRESCRIPTION
OPIOIDS IN 2018.

#### 130+

PEOPLE DIE EVERY DAY FROM OPIOID-RELATED DRUG OVERDOSES.

#### **New highs**

United States, drug overdose deaths\*, monthly



Source: Centres for Disease Control and Prevention

\*Deaths involving more than one drug are counted multiple times

sources

- 1.) https://www.hhs.gov/opioids/about-the-epidemic/index.html
- $2.) \ https://cen.acs.org/articles/95/i24/Periodic-graphics-opioid-epidemic.html$

63.1%

OF DRUG-RELATED DEATHS INVOLVED AN OPIOID DRUG.

"Since 1999, opioid overdose deaths have quadrupled and opioid prescriptions have increased markedly -- almost enough for every adult in America to have a bottle of pills."

-US Surgeon General Vivik Murthy

## **GEOGRAPHY**



Figure 1:

- When looking at the crisis overall, the geographical distribution of the crisis is primarily in the Appalachian, Midwestern, and Eastern regions of the United States, although western states like Arizona, New Mexico, Utah, and Idaho are also regions of concern.
- Synthetic opioids have become the prominent type of drug in contributing to death rates during the opioid epidemic in recent history. Its impacts are more severe compared to natural opioids and heroin.

#### **GEOGRAPHY**

The preceding maps have been statistical constructed through analysis of death rates through opioids throughout the years of 1999-2016. Progressively darker shades indicate higher rates of death rate growth. A visual analysis shows that for opioids, generally, the eastern states have become centers of the crises, with 8 states: Connecticut. Illinois. Indiana. Massachusetts, Maryland, Maine, New Hampshire, and Ohio tripling death rates through opioids every year (Kiang et al. 2019). Moreover, doubled rates in Pennsylvania, and Washington D.C. (Kiang et al. 2019). A study conducted found that high-risk counties were associated with lower numbers of offering medication providers opioid use disorder, lower numbers of primary care physicians and mental health professionals, and hiaher numbers of prescription, providing a possible explanation as to why these regions may have greater numbers of opioid deaths (Haffajee et al. 2019). Moreover, only 2.2% of physicians with waivers from the DEA (Drug Enforcement Agency) to provide MAT treatment and 90.4% of physicians are located in urban regions (Rigg et al. 2018). Regions that don't have many urban centers may have less access life-saving to preventative treatments, potentially leading to higher death rates from opioids. However, further research must be conducted into these details to prove causation.



Pictured above is a photo of an urban landscape. Most physicians who are eligible to provide MAT do so in these settings, disadvantaging afflicted rural communities.

## PEOPLE AFFECTED

The opioid crisis's toll is felt across the lifespan and in every social demographic group, but more heavily burdens vulnerable populations, such as those experiencing homelessness and individuals following release from the criminal justice system. OCEAN's mission echoes the powerful role the community can have in addressing the opioid epidemic. Our goal is to alleviate the opioid epidemic through community-based work, not trying to solve the separate issues, but using these communities to reduce burdens of the crisis.



## MEDICAL PROFESSIONALS

OCEAN recognizes the value of engaging health care systems and professionals to improve community education and care for patients with opioid use and misuse disorder. OCEAN urges health professionals to work alongside more effectively with law enforcement, public officials, and others to address social determinants of health in the national opioid crisis. The key is to balance effective pain management with reducing the burden of opioid use disorder on patients, physicians, and the healthcare system. It's important to gain an understanding of all new laws and regulations, stay informed on recent discoveries into the science of opioid addiction, and continue to look for new tools that can help improve the prescription decision-making process.

## INCARCERATED FOLKS

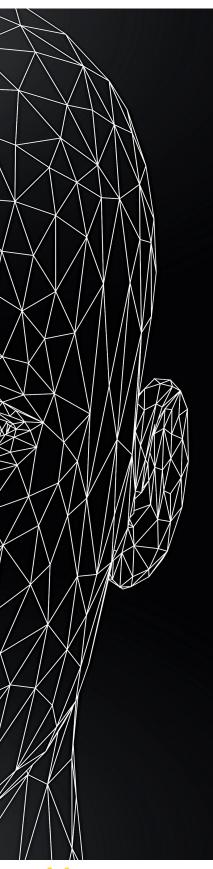
Post-release opioid-related overdose mortality is the leading cause of death among people released from jails or prisons (Joudrey et al., 2019). The impact of opioid use on individuals transitioning from jail or prison back to the community is overwhelmingly negative. Outcomes include higher rates of returning to the criminal justice system, harm to families, negative public health effects such as the transmission of infectious diseases, and death.

Within 3 months of release from custody, 75 percent of formerly incarcerated individuals with an OUD relapse to opioid use, and approximately 40 to 50 percent are arrested for a new crime within the first year (SAMHSA, 2019, pg. 3). A lack of rehabilitation services are offered for formerly incarcerated individuals with Opioid Dependency Disorder entering back into the environment where their substance use originated, putting the individual at high risk for relapse and overdose.

## THOSE EXPERIENCING HOMELESSNESS

Individuals experiencing homelessness have higher rates of substance abuse disorders, poorer health, and severe mortality rates by opioid overdose than national averages (NHC, 2016, pg. 2). Addiction can cause and prolong homelessness which complicates a person's ability to engage in accessing treatment. Many individuals are falling into homelessness due to their dependence on opioids. The high cost and unique addictiveness of these drugs make those that are homeless much more likely to remain unhoused. The main barrier to any type of treatment for this population is a lack of residential stability, prioritizing basic daily needs, limited income, lack of social supports, lack of transportation and/or health coverage and other financial resources which make adherence to daily medication and frequent therapy regimes more difficult (NHC, 2016, pg. 4).

## **TREATMENTS**



# OPIOID ANTAGONIST TREATMENT

Opioid antagonists are one type of pharmacotherapeutic treatment currently used to address opioid addiction. Opioid receptor antagonists bind to opioid receptors but do not directly influence or affect the postsynaptic cell, therefore creating no excitatory or inhibitory response (Veilleux et al., 2010, pg. 157). Opioid antagonists are used to reverse the physical effects of opioid overdose in order to restore bodily functions back to normal (Dorp et al., 2007, pg. 126). Two central opioid antagonists are naloxone and naltrexone. Naloxone can be administered orally but is most effective when administered via injection, with a brief duration of time that approximately lasts 30 minutes (Dorp et al., 2007, pg. 126). Naltrexone is more favorable in that it is administered orally with a longer duration of time due to its higher potency compared to naloxone (Dorp et al., 2007, pg. 126). Both drugs are effective in successfully blocking opioid receptors and mediating opioid addiction.

#### **OPIOID AGONISTS**

Opioid agonists are also medications that bind to opioid receptors to reduce effects of subsequent opioid use, but are different from opioid antagonists in that they employ similar effects as opioids (Veilleux et al., 2010, pg. 157). The two most widely used opioid agonists for opioid addiction are methadone and buprenorphine. Methadone is a fullopioid agonist which effectively binds to opioid receptors and blocks them, but is highly addictive and must be administered under controlled conditions (Veilleux et al., 2010, pg. 157). Buprenorphine is a partial-opioid agonist, which makes it less active at opioid receptors but high affinity for the opioid receptor, therefore exerting antagonistic actions that block the effects of other opioids (Nielsen et al., 2014, pg. 7). While opioid antagonists directly block opioid receptors without activating them, opioid agonists involve prescribing maintained doses of opioid medication in order to slowly decrease illicit opioid dependence (Nielsen et al., 2014, pg. 7). Opioid agonists are useful in dealing with opioid dependence and overdose because administration of these medications are meticulously controlled.

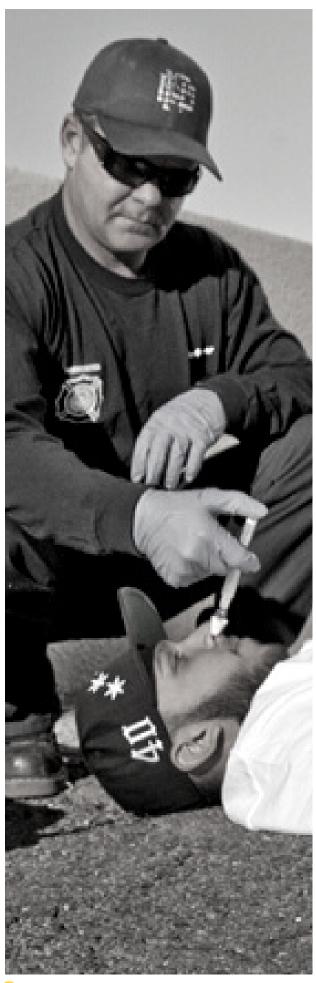
## **TREATMENTS**



Pictured above is an opioid addicted individual being treated by a health professional.

#### **MEDICATION ASSISTED TREATMENT**

Medication-assisted treatment is "a form of pharmacotherapy and refers to the treatment for a substance use disorder that includes a pharmacologic intervention as part of a comprehensive substance abuse treatment plan" (Roberto et al., 2014, pg. 307). By using opioid-agonist medications along with behavioral therapies and counseling, treatment for opioid addiction and overdose will be more effective. The three current FDA-approved drugs used for medication-assisted therapies are the opioid agonist methadone, the opioid antagonist naltrexone, and the partial-agonist buprenorphine (Levin, et al., 2007). Compared to other chronic health conditions, the treatment of substance abuse disorders not only needs proper medications but also help from social workers, counselors, and community-based, non-medicated treatment strategies (Roberto et al., 2014, pg. 307). An overwhelming number of research shows evidence that the MAT strategy is positively effective, but is underutilized due to persisting stigma regarding MAT as well as low education on the subject (MAT, 2014). When monitored and prescribed correctly, MATs have proved to be effective in helping patients recover from opioid addiction, reduce overdose, and is safe and costeffective (Volkow et al., 2014, pg. 2064). There is also evidence shown that proper MAT usage not only increases patient's retention in treatment and social functioning, they also reduce engagement in criminal activities and transmission of diseases (Volkow et al., 2014, pg. 2064). The MAT approach is a valuable tool because of its comprehensive nature, which allows it to address opioid addiction and dependence from a multidisciplinary perspective rather than just a biomedical one.



Due to barriers such as stigma and negative attitudes because of misunderstanding as well as policies, access to MAT is limited and is underutilized (Volkrow et al., 2064). Many health-care professionals favor an abstinence model and believe that the MAT approach merely replaces one form of addiction with another (Volkrow et al., 2065). Stigma has also helped to shape how MAT programs are seen in the U.S., is especially and directed towards people who have drug addiction and the negative connotations associated with them (Mcelrath, 2017, pg. 336). In addition to this, there are policy and regulatory barriers that the impede proper implementation οf MAT into treatment facilities. These include inconsistent public and private insurance coverage for MAT and hindrance to access and care (Volkrow et al., 2065). From this, it is important to raise more awareness on the effectiveness of MAT as well as more education on how it works while reducing stigma. Advocating for proper implementation οf MATmedical facilities will also help make the approach more likely to be accepted. One limitation of MAT is that it is an ineffective strategy for helping the homeless. Because there is no treatment facility, they may not ever show up in the same place and receive consistent again treatment.

Pictured to the left is a man who has overdosed being provided life-saving opioid antagonist medication.

#### Average Number of Days of Heroin Use During Treatment

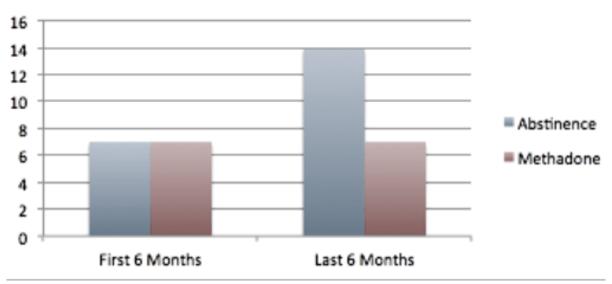


Figure 2

	Expected Number of Years of Survival	Cost
Methadone Treatment	31.0	\$218,000
Abstinence	30.4	\$209,000

Figure 3: (Masson et al. 2004, 723)

Data taken for all figures and tables on this page come from from Masson et al. article, "Cost and cost-effectiveness of standard methadone maintenance treatment compared to enriched 180-day methadone detoxification."

Figure 2: Abstinence methods demonstrate that in the long run, individuals are more likely to have increased usage compared to individuals who were treated with MAT (Masson et al. 2004).

Figure 3: Models made under the assumption that intervention effects would be eliminated after 10 years predict the following results. Despite methadone treatment being slightly more expensive, it is the more cost-effective method due to the long-term results of decreased opioid use. Other research argues that methadone treatment could also be considered more cost-effective for its ability to reduce transmission of HIV and higher levels of quality of life (Masson et al. 2004).

## HARM REDUCTION

#### **SUMMARY**

The harm reduction approach has its roots in public health, where it "does not endorse drug use, but accepts drug use as a reality and focuses on reducing its harmful consequences" (Hawk et al., 2015, pg. 239). Essentially, it is an attempt to mitigate the severity of the opioid crisis by creating safeguards and overseeing opioid use. There are many types of harm reduction strategies that can be used for reducing mortality and morbidity of opioid addiction and dependence. These include: naloxone distribution. policies to increase bystander assistance, targeted overdose education, and much more (Hawk et al., 2015, pg. 239). Compared to Europe and other countries, the U.S. currently is lagging in embracing harm reduction policies regarding illicit drugs due to varying policies between states (Nadelmann and Lasalle, 2017, pg. 1).



Pictured above is a kit of clean needles that will help reduce disease transmission for opioid users.

## **PREVENTION**

There are many factors that influence opioid addiction and dependence including biological and social factors, demographics, past experiences, and much more. We emphasize prevention as a collaborative effort where the combined efforts of community, physicians, and government can all contribute to increase prevention regarding opioid misuse and addiction. We also emphasize community-based prevention and strategies for the opioid crisis from a holistic perspective such as education and community-based medication disposal programs.

#### Education

Widespread concern about opioid addiction and overdose has initiated a number of prevention methods, including education as one of them. Education of the public, patients, medical professionals regarding overdose risk factors, proper administration of treatment medications, and responses to overdoses are crucial in preventing opioid addiction and dependence (CDC, 2012, pg. 2). It is important to establish community-based and public health guided overdose education programs in order to prevent opioid overdose fatalities among people who use illicit and prescription opioids (Mueller et al., 2015, pg. 241). Studies have shown that providing overdose education can greatly prevent mortality, where education improved people's knowledge of safely administering opioids in correct dosages and also showed that people were more likely to enter treatment facilities for addiction earlier (Mueller et al., 2015, pg. 242). By increasing education on overdose, overdose prevention will also be strengthened as more individuals will know proper methods of safely administering use as well as the detrimental consequences opioids have on the body if taken excessively.

#### **Community-Based Medication Disposal Programs**

With prescription opioid abuse being such a big problem today, many consumers do not know how to properly dispose of prescription medication which is a significant contributor to opioid mishandling. Improper disposal of unused medications such as flushing them down the toilet or throwing them in the garbage have the potential to harm humans, wildlife, and the environment (Thach et al., 2013, pg. 23). There is also the issue of many prescription drugs being easily obtained to the general public through misappropriation. Many prescription drugs become unneeded due to expiration, ineffectiveness, resolved patient condition, side effects, and failure to take medicine which lead to excessive morbidity and mortality when in the wrong hands (Perry et al., 2014, pg. 275). In order to tackle the issue of prescription drug misappropriation, more community-based medication disposal programs should be implemented. These collection sites and medication-take-back events help decrease the availability of prescription drugs for unauthorized use, therefore decreasing opioid addiction and dependence that would occur if these medications were left in the open (Perry et al., 2014, pg. 278). In accordance with educating the public about opioid abuse, a critical factor to the success of communitybased medication disposal programs is the value of them to consumers, which will allow these programs to be more effective (Thach et al., 2013, pg. 26). Incorporating more disposal sites as well as educating people on the value of proper disposal will allow for safer outcomes when handling prescription medications.

# PHARMACEUTICAL COMPANY TIMELINE

THIS TIMELINE PORTRAYS MAJOR EVENTS REGARDING THE HISTORY OF HOW THE OPIOID EPIDEMIC CAME TO BE AS WELL AS PHARMACEUTICAL INDUSTRIES AND THEIR CONTRIBUTION TO THE OPIOID EPIDEMIC. THIS SPECIFICALLY FOCUSES ON PURDUE PHARMACEUTICALS AND HOW OXYCONTIN WAS FALSELY MARKETED.

1914

Historically, during the nineteenth century drugs were marketed freely and prescribed for a number of different treatments until the Harrison Narcotics Act of 1914 was passed, which demanded the manufacturing and distribution of opioids and cocaine be regulated (Vadivelu et al., 2018, pg. 2).

1986

The World Health Organization announced the "undertreatment of postoperative and cancer pain" in 1986, which then resulted in numerous publications addressing the undertreatment of pain and the need to humanely treat all kinds of pain that were not being addressed (Jones et al., 2018, pg. 15).

1995

Purdue Pharmaceuticals, one of the nation's leading pharmaceutical companies at the time, emphasized that Oxycontin needed to be prescribed to a broader range of patients, not just cancer patients (Ross et al., 2019). Prescribing twice the amount of the daily dose was also emphasized for better benefits (Ross et al., 2019).

1999

One of Purdue Pharmaceutical's marketing strategies was to push the prescription of Oxycontin to position the drug as "helping to solve an epidemic of chronic pain in the U.S." as well as cultivate medical professionals to focus on pain overall (Ross et al., 2019).



2000

Oxycontin was regularly prescribed because of the assumption that it had low abuse rates, when in reality it was heavily abused (Jones et al., 2018, pg. 16). Purdue Pharmaceuticals, the manufacturer of Oxycontin, continued an aggressive marketing and advertising campaigns to promote Oxycontin as safe, even though Oxycontin had a lack of increased efficacy in treating pain in comparison to other medications (Hirsch, 2017, pg. 83).

2004

Purdue Pharmaceutical's aggressive advertising eventually led to warnings from the Food and Drug Administration over mislead advertisements (Hirsch, 2017, pg. 83). On February 12, 2004, the Food and Drug Administration warned Purdue Pharmaceuticals that several of their advertisements were unsubstantiated market claims or false advertisements (Ross et al., 2019).

2007

In 2007, Purdue Pharmaceuticals pleaded guilty to misleading advertisements of Oxycontin just as the opioid epidemic began to inflict serious damage (Jones et al., 2018, pg. 16). Allegations included that Purdue Pharmaceuticals intentionally distorted the risk of opioid addiction from Oxycontin, which mislead healthcare industries and physicians into prescribing more and overstating benefits (Jones et al., 2018, pg. 16).

2014

In Commonwealth of Kentucky vs. Purdue Pharma, the state of Kentucky alleged that Purdue Pharmaceuticals violated Kentucky Law by providing misleading advertisements, resulting in adverse and detrimental health effects (Ross et al., 2019).

## **POLICY TIMELINE**

THIS TIMELINE DETAILS ANY RELEVANT LEGAL RULINGS AND NEW LAWS PASSED REGARDING THE OPIOID EPIDEMIC.

80s-90s

2000

2002

2006

2010

12.2016

10.2017

Activists of the Pain Epidemic rally for the extension of opioid use on noncancer chronic pain, with policy changes being implemented at the federal and state level to accommodate this request (Gross and Gordon 2019).

The Drug Addiction Treatment Act of 2000 is passed, which allows providers to prescribe schedule III, IV, and V classified medicine to treat opioid addiction (Jones et al. 2018). Permission must be first secured from the Center for Substance Abuse and Mental Health Services Administration to do so (Jones et al. 2018)

FDA approves buprenorphine and buprenorphine/naloxone for clinical use (Jones et al. 2018).

Justice Department writes a prosecution memo that establishes Purdue's knowledge of the addictive quality of OxyContin. A closed door meeting between Senior Department of Justice officials and Purdue lawyers results in a fine, rather than a conviction ("The Memo").

Affordable Care Act and Mental Health Parity and Addiction Equity Act both passed, providing increased access to care and treatment for opioid addiction (Jones et al. 2018).

21st Century Cures Act passed, which "increase[d] block grant funding for substance abuse and mental health issues..." (Gross and Gordon 2019, 70).

The US Government officially declares the opioid epidemic as a public health emergency. (Jones et al. 13)



06.2018

Maura Healey sues Purdue Pharma over its false marketing of OxyContin to maximize profit at the expense of consumers (Office of Attorney General Maura Healey 2018).

10.2018

Substance Use-Disorder Prevention that Promotes Opioid Recovery and Treatment (SUPPORT) for Patients and Communities Act passes. Some provisions of the new bill include increased funding for state prescription drug monitoring programs, expansion of drug collection centers for pills, and mandates the creation of addiction recovery centers in areas in impacted areas (Garvin 2018).

11.2018

Pesce v. Coppinger, a Massachusetts court case, establishes that Pesce is allowed to continue methadone treatment in custody, despite Essex County House of Corrections trying to impose a non-MAT treatment that aligns with their established practices (Pesce v. Coppinger).

05.2019

John Kapoor and other executives of Insys Therapeutics are convicted guilty for convincing doctors to promote their opioid, Subsys, when not necessary and lying to insurance companies about coverage (Emanuel 2020).

09.2019

Purdue Pharma, the maker of OxyContin, agrees to a \$12 million settlement for its role in allowing the opioid crisis to happen (DeCosta-Klipa 2019).

## **FDA TIMELINE**

THIS PORTION WILL GIVE A BRIEF HISTORY OF THE FDA'S ROLE IN THE ONGOING EFFORT TO ENSURE SAFE OPIOID USE.

The U.S. Food and Drug Administration (FDA) has a central role in addressing the opioid epidemic. The agency is responsible for approving new drugs and reformulations, giving it an important gatekeeping function, and also, along with the U.S. Drug Enforcement Administration (DEA), has a responsibility of monitoring the use and misuse of available opioid products. This portion will give a brief history of the FDA's role in the ongoing effort to ensure safe opioid use, examining the FDA's chronological Timeline of Selected FDA Activities & Significant Events Addressing Opioid Misuse & Abuse. While the FDA's timeline lists many, this page will only mention some).

2001

2003

2009

2009

2011

2011

OxyContin label was changed to add and strengthen warnings about the drug's potential for misuse and abuse.

FDA issued a Warning Letter to OxyContin's manufacturer for misleading advertisements.

FDA launched the Safe Use Initiative to reduce preventable harm by medications, including opioid.

FDA began working with U.S. Drug Enforcement Administration (DEA) and others to help educate the public on safe disposal of opioids.

FDA began asking the makers of OxyContin and other addictive long-acting opioids to pay for safety training for more than half the physicians prescribing the drugs, and to track the effectiveness of the training and other measures in reducing addiction, overdoses and deaths.

FDA supported the White House Office of National Drug Control Policy (ONDCP) report Epidemic: Responding to America's Prescription Drug Abuse Crisis, a comprehensive action plan to address the national prescription drug abuse epidemic.



2012

FDA implemented the ER/LA opioids REMS program, which includes voluntary training for prescribers.

\*A 2019 research report concludes that despite a multitude of assessments, 5 years after the initiation of the ER/LA opioids REMS program, the FDA and drug manufacturers could not assess whether the ongoing ER/LA REMS had accomplished the goal of ensuring the effectiveness of the training and other measures in reducing addiction, overdoses, and deaths.

Alternative observational study designs would have allowed for more rigorous estimates of the REMS effectiveness, improving the ability of the FDA and ER/LA manufacturers to critically evaluate and iteratively improve this important program (Heyward et al., 2019).

In an open letter to prescribers, FDA and health professional organizations asked all prescribers of opioids to ensure they have thorough knowledge of the FDA-approved product labeling for the opioids they prescribe, and to ensure they have adequate training in opioid therapy. FDA also encouraged all prescribers to help curb our nation's opioid epidemic.

FDA approved Evzio (naloxone hydrochloride injection) for the emergency treatment of known or suspected opioid overdose. Naloxone is a medication that rapidly reverses the effects of opioid overdose.

FDA took action against 21 websites marketing unapproved opioids as part of agency's effort to target illegal online sales.

FDA launched a public education campaign to encourage safe removal of unused opioid pain medicines from homes.

2013

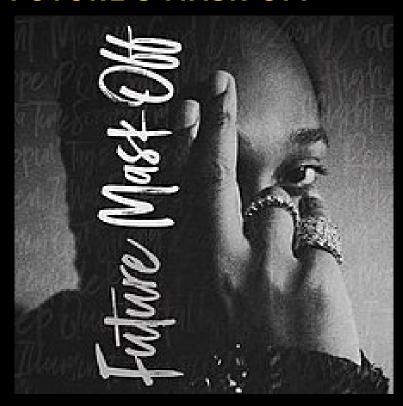
2014

2018

2018

## POPULAR PERCEPTIONS

#### **FUTURE'S MASK OFF**



#### MACKLEMORE'S DRUG DEALER



## POPULAR PERCEPTIONS

#### HASAN MINHAJ'S PATRIOT ACT



#### JOHN OLIVER'S LAST WEEK TONIGHT



#### **CAMPAIGNS INTRODUCTION**



OCEAN believes that promoting education on what addiction is and how to prevent it can greatly help decrease stigma and discrimination surrounding the opioid crisis. This campaign addresses social stigma towards addiction and aims to inform others about how addiction biologically and socially functions. In turn, our goal is to reduce and pave ways for new treatment approaches.



OCEAN believes that denying individuals access to MAT during their stay in correctional facilities does not properly set up incarcerated folks with the means to thrive and recover after leaving the correctional facility. This campaign addresses necessary reform to approach treating individuals afflicted with opioid addiction in order to reduce relapse and overdose rates. This campaign encourages collaboration with correctional facility management to establish training programs for staff

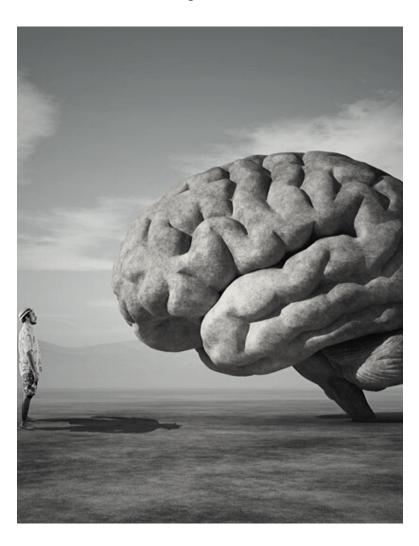


OCEAN believes that to truly combat the crisis, feasible options with biology and society must be kept in mind. OCEAN is aware of the lack of facilities to treat those experiencing homelessness or those on the brink of becoming homeless which presents a greater problem for public health officials and prescribers. This campaign raises issues due to the inconsistent care and limited ways to follow-up with patients. This campaign also employs the importance of emergency crisis responses in order to alleviate the epidemic in the homeless population.

## ADDICTION IS NOT A CHOICE

#### **CAMPAIGN GOALS**

People suffering from addiction and substance-abuse often face stigma and discrimination, therefore hindering access to healthcare as well as other resources. OCEAN aims to promote an educational campaign of what exactly addiction is and isn't to generate an appropriate response as well as promote a cultural understanding that addiction is an illness.



## Education Campaign Why We Need This (A Case Example):

The concept of addiction has suffered greatly from misconception and misinterpretation. From this, there are barriers to pain management caused by negative presumptions of addiction that are encountered in health care facilities by professionals, patients, and families (Mccaffery and Ferrell, 1996, pg. 184). Stigma and discrimination play hand in hand with the concept of addiction, where addiction is often blamed on the moral choices and willingness of the individual rather than a serious medical illness (Olsen and Sharfstein, 2014, pg. 1393).

#### **Intended Action:**

In order to counteract the effects of misconception, it is important to spread awareness and advocacy for what addiction actually is. This campaign will provide practical information from an educational point of view to reduce stigma. We will raise awareness on what addiction actually is and how understanding its nature will help pave new understandings of the opioid crisis can be solved. One way of doing so will be to feature the art of individuals who were or are going through the process of addiction that convey their experience. Another way to do so will be to create a myth vs reality fact sheet regarding addiction that we can distribute to stakeholders and community members. Overall, this campaign will focus on developing ways to correct biases and stigma that surrounds the opioid crisis, and urge others to take action against them, as well. As OCEAN is established on a community-based mission, this campaign will serve with the same roots of community action to encourage a platform for safe and stigma-free discussions.



A woman undergoes detox treatment while in a correcitonal facility.

#### MEDICATION, NOT ABSTINENCE

#### **CAMPAIGN GOALS**

Incarcerated individuals are subjected to a prison system that does not prioritize their well-being by subjecting them to forced abstinence. Drawing on medical literature, we conclude that abstinence is ineffective at preventing use and relapse upon release from a correctional facility. Medication assisted treatment using drugs like methadone should be mandated in every correctional facility for every incarcerated individual - not just select groups, like pregnant women.



Prisoners participating in a voluntary rehabilitation program while in jail.



## CORRECTIONS FACILITY STAFF TRAINING AND SENSITIVITY PROGRAMS:

#### Why We Need This (A Case Example):

Informational interviews reveal that some non-medical staff did not acknowledge the symptoms of individuals undergoing withdrawal and failed to connect them to medical aid (Maradiaga et al. 2016). In fact, some individuals had to lie about the types of symptoms they were experiencing to force staff to pay attention to them (Maradiaga et al. 2016).

Intended Action: Thus, OCEAN wants to collaborate with correctional facility management and establish training programs for all staff. This will be especially important as a short-term remediation as correctional facilities are in a transition period to get the funding necessary to implement MAT for every prisoner. One primary topic that would be taught is the biology of withdrawal and what and why symptoms manifest. A biological understanding of how the body copes without the use of drugs can contextualize the enormous amounts of pain that incarcerated individuals are facing for non-medical and generate sensitivity/understanding to the former group's needs.



A man takes his medication while a correctional facility staff member oversees the process.

#### MANDATED INDIVIDUAL ASSESSMENTS:



Medical professionals within correctional facility systems need to wean off their patients from opioids in an individualized manner to ensure succesful rehabilitation.

Why We Need This (A Case Example): First of all, if you're on 200 mg of methadone, in jail, they give everyone 40[mg]. [Then] they decrease your medication little by little until you get to 5. Once you're at 5, you go in the next day to report in and they say no more (Maradiaga et al. 2016, 5)

Intended Action: Applying a blanket treatment will be ineffective as it assumes that all individuals are at the baseline upon same enterina correctional facility. Incarcerated individuals should meet with physicians and undergo an intensive assessment. Factors to look for include: current methadone (or other agonist-based medication) dosage, how long they've been on this dosage, history of dosage changes, and previous failures to comply with it. The physician should then use this history to create an individualized plan for the incarcerated individual on when to decrease dosage to make sure that the individual avoids being forced into physiologically and challenging withdrawal symptoms. To do so would be unethical based on the principles of beneficence (to do good) and nonmaleficence (doing no harm) (Bone et al. 2018). OCEAN will work alongside managers of correctional facilities to come up with a standardized procedure, connecting with non-medical managers network of health professionals to provide advice, if they lack the medical staff necessary to provide guidance. This is more typical of "drug courts and probation/parole agencies" (Friedmann et al. 2012, 4). Treatment is a medical issue and should not be solely dictated by non-medical professionals.

## COMMUNITY PARTNERSHIPS TO ENSURE ADHERENCE POST-RELEASE:



#### Why We Need This (A Case Example):

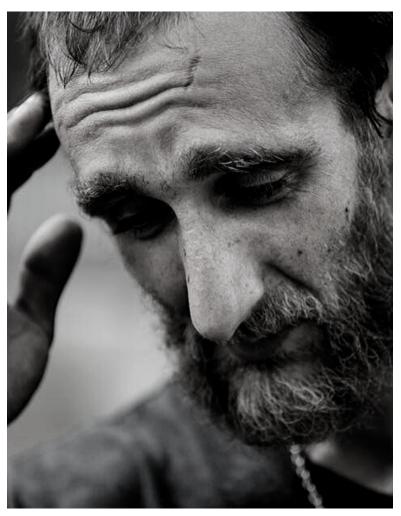
One study found that individuals who underwent methadone treatment had heroin usage rates of an average of 7 days per month throughout a 12 month period (Masson et al. 2004, 722). That being said, individuals who undergo methadone treatment are not necessarily going to stop usage upon release.

Intended **Outcomes:** Continuous support must be provided to released individuals to make sure they are following through with their medication and avoiding relapse. OCEAN advocates for a partnership between community clinics and correctional facilities; near the end of an incarcerated individual's sentence, if they opt in for this service, the correctional facility can start the paperwork to sign up newly released individuals for psychosocial therapy services and arrange meetings with medical physicians. This can avoid potentially long temporal gaps between release and first care, due to medical back-up, and ensure that individuals remain compliant.

## HOMELESS NOT HOPELESS

#### **CAMPAIGN GOALS**

Practice harm reduction models with physicians and prescribers by encouraging opioid agonist treatment at the short-term level. Urge pharmaceutical companies and scientists to develop opioid agonists with lower risks in order to safely send opioid agonists out to the public without contributing further to the crisis. Advocate for accessible opioid antagonists.



#### Why We Need This:

A clinic's prime example of why harm reduction is important when treating those experiencing homelessness and/or housing insecurity is the providing of clean needles. If someone is going to shoot heroin, it would be best to give them clean needles to reduce transmission of other diseases rather than encourage abstinence. Encouraging physicians and prescribers to use opioid agonist treatments in their short-term interactions with patients struggling with opioid use disorder and the burden of homelessness would sharply reduce the long-term effects of the opioid epidemic.

#### **Intended Action:**

OCEAN will begin at the medical student level, where many are volunteering at free health clinics. Starting here and educating the next generation of physicians, harm reduction will be ingrained in how the population is treated. Opioid agonist treatment is the most shortterm crisis response available for the population as follow-up is more tricky and less feasible. OCEAN will fund clinics and public health sectors committed to harm reduction and the responsible usage of opioid agonist treatment. Opioid agonists such as methadone are now primary contributors to the opioid crisis. What was once a shortterm method for reducing the burden of opioid addiction made the epidemic even worse. It is critical that we push researchers, scientists, and pharmaceutical companies to consider low-risk opioid agonists that can be safely prescribed. When such treatments are given to those that will reach many of their peers such as in the homeless population, it becomes increasingly important to regulate its contents in order to prevent further abuse. OCEAN will host conferences that address the different key players that make opioid agonists and advocate for biochemical research that provides low-risk and less addictive measures.

## RECOMMENDATIONS

1

## EXPANDING MEDICAID UNDER THE AFFORDABLE CARE ACT:

This is particularly useful in addressing the urgent need to create greater accessibility and prevention efforts to reduce the barriers for Medication-Assisted Treatment (MAT) and Naloxone. This is especially crucial for high-risk populations that are more unlikely to be uninsured and prone to opioid use dependency (OUD) and unable to receive treatment due to the lack of prescription accessibility and affordability.

## MANDATING THE USE OF MAT IN CORRECTIONAL FACILITIES:

2

The court case Pesce v. Coppinger provides legal precedent that deems correctional facilities unable to revoke the incarcerated individual's ability to continue the use of methadone while in prison. MAT has been proven to be more effective in reducing overdose after release from prison than abstinence-based treatments, making it a better alternative.

## INCREASING ACCESS AND REDUCING RISK OF OPIOID AGONIST TREATMENT (OAT):

3

Historical precedent has shown that OAT is an effective pharmacological treatment to opioid use disorder, such as with drugs like methadone and buprenorphine. However, they have now looped back and contributed to the opioid crisis, signaling to us that we must be thinking about the positive and negative biochemical effects of opioid agonists. Prescribers must be aware of these consequences and use them more widely rather than withholding them for cost reasons. More can be done on state and federal levels to fund OAT, allowing those experiencing homelessness or housing insecurity to access immediate care.



## **FUNDING**

As a nonprofit, OCEAN requires the generosity of our donors to sustain operations. In the past year, we raised over \$350,000 by auctioning off artwork made by individuals who have been affected by the opioid crisis during our Art Share fundraiser. Moreover, we have secured a collective amount of \$500,000 in grant funding from federal agencies like the Substance Abuse and Mental Health Services Administration to support our campaign work. This amount is in addition to the donations that the sponsors who believe in our mission provide us annually. Although we have been able to do a lot of great work with the current finances we have, we are ready to take the next steps necessary to maximize our impact on affected communities.

OCEAN has been steadily growing since its inception and is now looking to expand our reach by establishing new offices within the Illinois and New Hampshire region, two of many areas that have recently been identified as rapidly growing in terms of opioid overdose rates. As a nonprofit, we don't make any money off of the services we provide and are asking you to consider donating what you can to help us reach our goals of destigmatizing addiction and getting addicted individuals the treatment they need. Donations would go towards renting out an office space in these new locations, hiring new full-time staffers and training them, and partially subsidizing costs for partner clinics and public health groups looking to adopt MAT/harm reduction methodologies.

We hope you decide to become our partner in helping pave the way for a better future where individuals are able to get the proper care they need.

Thank you!

## **END NOTES**

# Thank you sincerely for your time and consideration. We would like to take this time to cite our sources and appreciation for them.

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